

AMENDMENT

In the Specification

Please amend paragraph 0036 as follows:

The initial cell check (ICC) element 412 examines an incoming cell in the circular buffer 346 and determines ATM level information, such as, PTI, CLP, HEC errors, type of cell, VPI/VCI, and an index that is assigned to the cell which is used as a reference for gathering statistics about the cell. The index is a number corresponding to a memory address in the CAM 324 (FIG. 3). The index is a tracking mechanism, such as a label, that the real-time segmentation and reassembly logic 355 uses to associate equivalent VPI/VCIs and VPI/VCI+CID without using the entire bit field of the VPI/VCI or VPI/VCI+CID. The CAM 324 (FIG. 3) can be thought of as a memory in reverse. Data goes in and an address comes out. This address is what is referred to as the index. The index is obtained from the CAM 324 whenever a unique VPI/VCI or VPI/VCI+CID is identified and added to the CAM 324 342. Indices (CAM addresses) are incrementally allocated. Additionally, VPI/VCI entries can be entered into the CAM by the user via software (not shown). The index is placed in the circular buffer 346 in the context portion 354 (FIG. 3). Presenting the VPI/VCI of the cell being analyzed to the CAM 324 triggers a return of either the index of that VPI/VCI or the addition of the VPI/VCI to the CAM 324, which returns an index defining the location at which the VPI/VCI was placed.